

Notice of Allowability

Application No.

10/069,048

Examiner

Steven D. Maki

Applicant(s)

KITAMURA ET AL.

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1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12-21-04.
2. ☒ The allowed claim(s) is/are 3,4 and 6-14.
3. ☒ The drawings filed on 21 February 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 122104
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 011505
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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Examiner's Amendment

1) An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Cancel claims 1, 2 and 5.

Change title to:

--Sealing material for plastic liquid crystal display cells including two-component epoxy resin composition--

With respect to canceling claims 1, 2 and 5, the following is noted: This application is in condition for allowance except for the presence of claims 1, 2 and 5 to inventions non-elected without traverse (see page 13 lines 18-21 of response filed 6-28-04 and paragraph 5 on page 5 of the office action dated 9-22-04). Accordingly, claims 1, 2 and 5 have been cancelled. With respect to the title change: see MPEP 606.01.

Reasons for Allowance

2) The following is an examiner's statement of reasons for allowance, which supplements applicant's arguments filed 12-21-04:

The 132 objection set forth in paragraph 1 of the last office action dated 9-22-04 has been withdrawn in view of the new abstract filed 12-21-04; it being noted (1) that the new abstract eliminates the combination of "tetrafunctional mercapto compound, a modified polymercapto derivative" *and* "a microencapsulated imidazole compound, or a

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methyl methacrylate adduct of an alicyclic diamine" and (2) the broad description of the composition at page 4 lines 8-12 describes neither weight percent ranges nor specific curing agents.

In the after final amendment filed 12-21-04, applicant challenges the examiner's official notice of "it is taken as well known / conventional per se in the liquid crystal art that ions in the liquid crystal material deteriorate the liquid crystal material". In response, the examiner cites Europe '696 (EP 787696) and Lee et al (US 2002/008821). Europe '696 teaches that ions from the glass substrate migrate into the liquid crystal material causing deterioration of the liquid crystal material (page 2 lines 17-18), but teaches using barrier layers to prevent migration of ions from glass substrates into the liquid crystal of a liquid crystal display device. Lee et al teaches that ions migrating from epoxy based resin sealant to a liquid crystal layer deteriorate the liquid crystal layer (see paragraph 18). Lee et al, which solves this problem by using first and second auxiliary lines 108 and 110 receiving direct electric current (paragraph 48), is not available as prior art since its filing date (7-24-01) is after the filing date (6-21-01) of applicant's PCT application and the filing date (6-21-00) of applicant's foreign priority document. Applicant has perfected his 119 foreign priority claim. See paragraph 5 on page 5 of the last office action.

The prior art of record whether taken singly or in combination fails to suggest using "from 15 to 84% by weight of a liquid epoxy resin having from 1.7 to 6 in weight average of epoxy groups in one molecule and an ionic conductivity of an aqueous solution obtained by extraction separation by contact mixing with 10 times by weight of

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pure water at from 40 to 80°C of 2 mS or less" and "from 10 to 50% by weight of a curing agent containing one or a mixture of two or more selected from (2A-1) a tetrafunctional mercapto compounds or (2A-2) modified polymercapto derivatives, having an ionic conductivity of an aqueous solution obtained by extraction separation by contact mixing with 10 times by weight of pure water at from 40 to 80°C of 0.6mS/m or less" and "from 1 to 25% of rubbery polymer fine particles having a softening temperature of 0°C or less and an average particle diameter of primary particles of from 0.01 to 5µm" in a **two-component epoxy resin composition** in combination with the remaining limitations of claim 3.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


3) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
January 15, 2005


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733 1-18-05